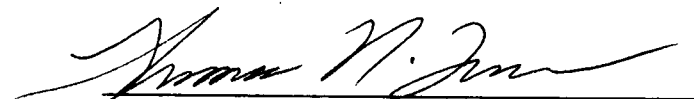


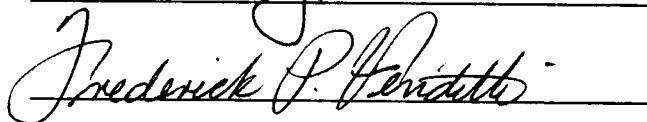
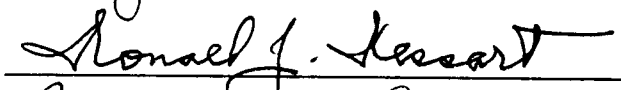
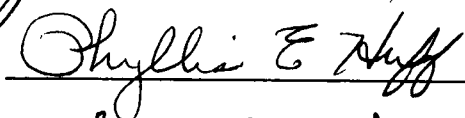
To the Graduate Council:

I am submitting herewith a dissertation written by Sherry Guy Morgan entitled "The Effects of a Volunteer Recreational Reading Program that Utilizes a Self-Report Measure and Pupil Incentives on the Attitude Toward Reading of Selected Pupils in Grades One, Two and Three." I have examined the final copy of this dissertation for form and content and recommend that it be accepted in partial fulfillment of the requirements for the degree of Doctor of Education, with a major in Curriculum and Instruction.



Thomas N. Turner,
Major Professor

We have read this dissertation
and recommend its acceptance:



Accepted for the Council:



Vice Provost
and Dean of The Graduate School

THE EFFECTS OF A VOLUNTEER RECREATIONAL READING PROGRAM
THAT UTILIZES A SELF-REPORT MEASURE AND PUPIL
INCENTIVES ON THE ATTITUDE TOWARD READING
OF SELECTED PUPILS IN GRADES
ONE, TWO AND THREE

A Dissertation
Presented for the
Doctor of Education
Degree
The University of Tennessee, Knoxville

Sherry Guy Morgan

December 1985

DEDICATION

This dissertation is lovingly dedicated to the memory of my mother, Virginia Kuster Guy. Her gentle example showed me the meaning of courage, faith and perseverance.

ACKNOWLEDGMENTS

This researcher wishes to thank several people for their help in the completion of this dissertation. First, I wish to thank Dr. Thomas N. Turner, Dr. Phyllis Huff, Dr. Estill Alexander, Dr. Donald Dessart and Dr. Fred Venditti who served as my director and committee, respectively. Each of these scholars contributed in unique and valuable ways to this work.

The researcher wishes to thank the Knoxville City School System, the reading Supervisor, Dr. Belva Holleman, as well as the principals, teachers and students of Mooreland Heights, Sequoyah, Griffin, and Chilhowee elementary schools for participating in this study.

The researcher wishes to express gratitude to her family and friends for their moral support and encouragement during this work.

Lastly, the researcher wishes to express deep appreciation to her husband, Charles W. Morgan. Mr. Morgan helped extensively with the collection of data and relieved the researcher of other responsibilities so that this work could be completed. Without his assistance, understanding and patience this work might still be unfinished.

ABSTRACT

The purpose of this study was to determine the effects of a single, specific volunteer recreational reading program that utilizes self-report measures and provides pupil incentives intended to improve the expressed attitudes toward reading of selected groups of pupils in grades one through three.

For the 1984-85 school year a short-term reading incentive program was planned and implemented throughout an urban school system. Some of the reading experiences and all incentives to read occurred during the school day. The main thrust of the program, however, was developed to be carried out during after school hours. Categories of competition were formed and prizes were awarded as incentives.

Attitudes of 241 pupils toward reading before the implementation of the program and after the completion of the program were assessed with the use of the Heathington Primary Reading Attitude Scale. In addition, ninety-one participants were interviewed by the researcher. Participants maintained a record of the number of minutes read daily and this record was verified by parents.

Nonparametric statistics were used in the analysis of the data. Tests included the Wilcoxon Matched-Pairs

Signed Ranks Test, Kruskal-Wallis One Way Analysis of Variance, and Spearman Rank Order Correlation Coefficient. The interview data were analyzed for type of response and frequency.

The findings of the study included the following:

1. Pre- and posttest medians on the attitude scale were not significantly different.
2. There was a nonsignificant correlation between the number of minutes students reported reading and their post attitude score.
3. A comparison of minutes of reading during week one with week four of the study showed a highly significant negative effect.
4. There was not a significant difference in pupil attitude toward reading between grade levels.
5. The interview data revealed that 96 percent of the students had positive feelings toward the program, 79 percent believed they would read more because of the program, and 78 percent believed they would continue to read more after the program.

TABLE OF CONTENTS

CHAPTER	PAGE
I. INTRODUCTION	1
Statement of the Problem	2
Purpose of the Study	4
Need for the Study	5
Questions	7
Assumptions	7
Delimitations and Limitations	8
Definitions	9
Procedures	10
Organization of the Study	12
II. REVIEW OF RELATED LITERATURE	14
Introduction	14
Defining Attitude Toward Reading	15
The Impact of Recreational Reading Programs on Students' Expressed Attitude Toward Reading	19
The Impact of Sustained Silent Reading Programs on the Expressed Student Attitude Toward Reading	23
Summary	30
III. METHODS AND PROCEDURES	32
Description of the Reading Marathon	32
Reading Marathon Guidelines	33
Selection of the Sample	34

CHAPTER	PAGE
III. (Continued)	
Selection of the Instrument	36
Administration of the Pretest	39
Administration of the Posttest	39
Interviews	40
Reading Records	40
Treatment of the Data	41
IV. ANALYSIS OF THE DATA	43
Introduction	43
Questions	44
Summary	51
V. SUMMARY, FINDINGS, CONCLUSIONS, DISCUSSION, AND IMPLICATIONS FOR FURTHER RESEARCH . .	54
Summary	54
Findings	57
Conclusions	59
Discussion	60
Implications for Further Research	64
BIBLIOGRAPHY	66
APPENDICES	73
Appendix A	74
Appendix B	78
Appendix C	82
Appendix D	87
Appendix E	91
VITA	102

CHAPTER I

INTRODUCTION

Pupils in school have historically spent a large portion of their school day learning to read. Recent trends toward an emphases on basic skills have focused even greater attention on the teaching of reading as a set of subskills. The factors that affect student reading acquisition are a subject of continuing research. Recently more educators have become aware of the importance of student attitude toward reading. These educators recognize that the child who reads more is likely to read better (Mork, 1972) and that only positive reading attitudes will bring the child to read frequently and independently (Hunt, 1960). This awareness of the importance of student attitude is not enough to ensure that the children that we teach to read will, in fact, become good readers or even that they will have appropriate attitudes toward reading. Quandt points out that:

It is one thing to be aware that reading attitudes are important. To understand in what ways attitudes affect reading instruction is quite another matter, and to build strategies for dealing with attitudes becomes even more complex.
(Quandt, 1976)

This raises at least one important question: Can teachers and schools, by providing structured and systematic approaches, influence student attitude toward reading?

This study was an attempt to analyze and describe the effects of a school system sponsored recreational reading program on the attitudes and habits of primary school children in four schools.

I. Statement of the Problem

According to Hunt (1960), the real task of the reading teacher is to make readers. Being a reader according to Hunt means more than just the possession of reading subskills by the student. Hunt's contention was that the real reader is one who chooses to read. Real readers are those students who can self-select and self-direct their reading in terms of purposes and values that are personal to them (Hunt, 1975).

The task of developing real readers has become increasingly difficult for teachers because of the recent emphasis on skill teaching at school and the competition from various nonreading entertainment media present in many homes today.

Hunt (1960) believed that many students who possess reading skill fail to use it because of lack of personal commitment to reading for their own pleasure or information. He pointed out that the reader becomes "turned off" in the primary grades by the emphasis on phonics and decoding (1960).

Cunningham (1984) noted that poor readers spend more time in school on isolated skills and less time on contextual reading than good readers. She emphasized that,

We know that all children should learn to read silently and that they can't learn this if all their instruction emphasizes oral reading.

Referring to opportunities to read independently, Chomsky (1978) wrote:

It seems to me that what is lacking in many children who read poorly in school is . . . self propelled activity. There is far more in learning to read than can be "taught" to a child. . . . The intricate internal organization of the material that has to take place requires active participation on the child's part. (p.15)

The problem for teachers is to find ways to increase the child's participation in the reading act. How can students, especially less able ones be motivated to read widely in light of today's emphasis on skill teaching? Motivating students to read is a problem faced by many educators.

Some schools have attempted to use sustained silent reading programs to increase interest in reading. Durkin (1972) found that many teachers reported an increase in the interest of students when both they and their students participated in this kind of activity.

The questions investigated by this researcher relate to a recreational reading program that is an extension

of the concept of sustained silent reading into the home and during after school hours. The researcher hopes to contribute to the body of knowledge regarding programs that attempt to improve student attitude and motivation toward reading.

II. Purpose of the Study

The purpose of this study was to determine the effects of a single, specific volunteer recreational reading program that utilized self report measures and provided pupil incentives intended to improve the expressed attitudes toward reading of selected groups of pupils in grades one through three.

The particular program under study was designed and implemented by supervisory and teaching personnel in the Knoxville City School System of Knoxville, Tennessee. The school system sponsored the program in the elementary schools throughout the district.

For the 1984-1985 school year a reading incentive program was planned and implemented. The program was largely created by a system-wide reading supervisor employed by the Knoxville City School System. As director of this recreational reading program, the reading supervisor solicited the participation of parents and well-known community leaders. Categories of competition were

formed and prizes were awarded as incentives. The official title of the program is "The Two Million Minute Reading Marathon," hereafter in this study referred to as the "marathon."

III. Need for the Study

The "marathon" as a type of recreational reading program appeared to be unique, at least insofar as indicated in the literature regarding other programs previously studied. Programs reported in the literature are those developed for use during school hours. The marathon was developed within a single urban school system. Some of the reading experiences and all of the incentives to read occurred during the school day. However, the thrust of the program was developed to be carried out by the participants during after school hours. This researcher found no reports in the literature of recreational reading programs of this type.

Most efforts to examine the recreational reading of students recorded the number of books read or titles of books to assess reading interests (Pointer, 1979; Harris, 1975). Most of these studies were directed at upper elementary students or secondary students. The attitude of students in primary grades toward recreational reading was ignored in the reported activities of these researchers.

Because attitude toward reading appears to be a very important factor in the decision to read (Alexander and Filler, 1976, p. 1) programs directed toward positive attitude change should be studied analytically. Few studies, however, have been undertaken to ascertain the affect of recreational reading programs on student attitude toward reading. Attitude improvement among disabled readers was reported by Colvin and Stetson (1980) as a result of a recreational reading program. First and second graders were reportedly positively affected by an in-school recreational reading program over a two year period by Pfau (1966).

There was no research identified by this investigator which purported to assess the affect on pupil attitude toward reading resulting from a voluntary recreational reading program occurring outside the school day and utilizing a self report measure. This study was undertaken to examine how one program affected attitude formation in primary grade students. This particular program was the result of collaboration by school administrators, teachers, parents, and private enterprise. This program was developed in order to foster positive attitudes toward reading and create the reading habit in young children.

IV. Questions

The questions to be answered during the study included the following:

1. Does a volunteer recreational reading program significantly affect pupil attitude toward reading?
2. Is there a significant correlation coefficient between the numbers of minutes students report reading and their post attitude scores?
3. Is there a significant difference in the mean amount of time pupils report reading during the first week compared to the fourth week of the twenty-eight day period?
4. Is there a differential impact of the program relative to grade level?
5. What will interviews with subjects reveal about subjects' attitude toward reading after the marathon?

V. Assumptions

This study is based on a number of assumptions. These include the following:

1. The selected groups adequately represent male and female subjects from the various socio-economic strata of the school system sponsoring this program.
2. Attitude toward reading can be measured.

3. The Heathington Primary Reading Attitude Scale is a valid and reliable instrument for measuring the attitudes of all the subjects in the sample.

4. Subjects will be both honest and accurate in their reporting of minutes of reading.

5. Attitudes toward reading can be changed.

VI. Delimitations and Limitations

A number of delimitations and limitations should be noted in considering the findings of the study. These include the following:

1. The subjects of the study represent only pupils in grades one, two, and three in four schools of the Knoxville City School System.

2. The program under study is voluntary for the participating schools, teachers, and students.

3. Attitude measures tend to reflect the attitude of the subject most accurately only on the days of the measurement.

4. Attitudes of the subjects toward reading may be affected by influences other than the program under study and these influences may be unknown to the researcher.

5. Information on actual minutes of reading is dependent on the accuracy of the reports by the subjects.

6. Information gained from the interviews is dependent upon the accuracy of the subject's perceptions and his/her willingness and ability to communicate this information.

VII. Definitions

A number of terms were used with particular meanings in this study. Some of these terms are the following:

Reading Attitude--a system of feelings related to reading which causes the learner to approach or avoid a reading situation (Alexander and Filler, 1976, p. 1). For the purpose of this study reading attitude is defined as a performance assessment as measured by the Heathington Primary Attitude Scale.

Attitude Measurement--an attempt to determine whether someone has a positive, neutral or negative attitude toward a stimulus (Anastasi, 1976).

Heathington Primary Reading Attitude Scale--a scale developed by Heathington (1975) that utilizes a Likert-type scale and statements made by children during her interviews with them. The scale is an instrument to measure attitude toward reading.

Two Million Minute Reading Marathon--a recreational reading program for grades K-5 which employs fifteen minutes of silent reading daily outside of school and fifteen minutes of oral reading by the teacher daily to the students and which utilizes self-report measures and pupil incentives.

Recreational Reading--reading for one's own pleasure.

Recreational Reading Program--a program designed to encourage students to read for their own pleasure.

Sustained Silent Reading--a period of reading time that is uninterrupted in which readers usually read silently for their own pleasure.

VIII. Procedures

Sample

The sample for this study consists of the first, second and third grades in four schools in the Knoxville City School System. Each school was chosen to participate based on the likelihood that it would be a participant in the voluntary recreational reading program. The researcher consulted with the reading supervisor to identify schools with principals who would be likely to support this program in their schools. The program was voluntary for schools and individual teachers. It was believed, however, that where principals supported the

idea the program would be likely to have a larger number of participants. From the list generated in this conference, the researcher attempted to represent various areas of the school system so that the data would not be biased by virtue of having been obtained in one particular socio-economic area. The sample contained 241 students.

Instrumentation

After a review of instruments developed to measure attitude toward reading, the Heathington Primary Reading Attitude Scale was chosen. Reasons for selection included the established validity and reliability of this instrument in other research use, its ease of administration and scoring, and its suitability for the sample.

The researcher also developed an interview guide to be used after the marathon was over to supplement the data from the attitude measure. Ninety-one children were interviewed.

During the marathon the students recorded the number of minutes of reading that they did each day after school. Parents verified each entry with their initials. The total number of minutes of reading for all children was recorded each week by the classroom teacher on a total class chart.

Collection of the Data

Students were administered the Heathington Primary Attitude Scale during the days directly preceding the marathon and again during the days directly after the marathon. Students were randomly interviewed a few days after the administration of the attitude scale. The time in minutes students reported reading was obtained from teachers' records and from the students.

Analysis of the Data

Nonparametric statistical tests were used to compare the median attitude scores of students on the pre- and post-measures obtained from the Heathington Primary Reading Attitude Scale. The mean numbers of minutes read during the first week was compared to the mean numbers of minutes read during the fourth (last) week of the marathon with a Wilcoxon Matched Pairs Signed Ranks Test and a t-test. Differences between grade levels were tested with the Kruskal-Wallis One Way Analyses of Variance. Frequency data were obtained from the interviews.

IX. Organization of the Study

This study will be presented in five major sections or chapters. Chapter I includes the introduction, statement of problem, purpose of the study, need for the study, assumptions, delimitations and limitations, definitions,

procedures, and a statement of the organization of the study.

Chapter II is a review of the literature relevant to sustained silent reading and recreational reading as it relates to student reading attitudes.

Chapter III is an explanation of the procedures followed in conducting this research study.

Chapter IV presents an analysis of the data.

Chapter V contains a summary and discussion of recommendations and implications for further study.

CHAPTER II

REVIEW OF RELATED LITERATURE

I. Introduction

This chapter presents a review of literature relative to the impact of recreational reading programs and sustained silent reading programs on expressed student attitude toward reading.

Literature regarding sustained silent reading programs is included in this review because sustained silent reading programs are generally similar to recreational reading programs in several ways. According to the literature positive attitude change is a goal of both sustained silent reading and recreational reading programs. Reading programs of both types also utilize student self-selection of reading materials and have been used in schools to supplement the instructional program. Another feature of both programs is that the student is expected to read on his/her own and for his/her own pleasure. These common factors seem to indicate that a review of literature on recreational reading programs should include studies on sustained silent reading.

The effect of recreational reading programs and sustained silent reading programs on student attitude

toward reading has been examined and reported by several researchers. Various definitions of attitude toward reading have been cited in the literature. A discussion of those definitions as well as a discussion of reading studies involving elementary school children follow.

II. Defining Attitude Toward Reading

While attitude toward reading has gained recognition as an important aspect of reading instruction (Alexander and Filler, 1976, p. 1), definitions of this terminology have not been consistent. Several educators have identified characteristics that partially compose the many facets of attitude toward reading.

After a careful review of literature, Epstein (1980) identified attitudes toward reading within the broader framework of a definition for attitude. Epstein focused on two types of definitions. The first, he called an operational definition. An operational definition was, in Epstein's view, the response of an individual to an instrument designed to measure attitude. In order to understand this response, Epstein maintained that the observer must understand the conceptual framework on which it was built. Thus, Epstein arrives at a conceptual definition for attitude. This conceptual definition possesses some characteristics that include the following:

1. An attitude is a mental construct that is not tangible. Therefore it must be inferred from observable behavior.
2. Attitudes are learned through experience.
3. Attitudes center on a focal object such as an idea, symbol, or phrase.
4. Attitudes predispose individuals to respond toward some object in a negative or positive way.
5. Attitudes are evaluative in nature and may be seen as feelings that are positive, neutral or negative in tone.

Within the operational and conceptual definitions given above, Epstein identifies attitude toward reading as measurable according to the observed pupil behavior. Apparently, Epstein believes that a positive attitude exists when reading is observed as the chosen behavior.

According to Ewing (1977), attitude toward reading is most evident in one's feelings, beliefs, and values. Because Ewing believed that attitudes are rooted in the affective domain, he calls attitudes dynamic and multi-dimensional. He believed attitude is based on personal experiences and on one's perceived needs. As these change, so may attitudes also be changed.

Teale (1982) also identified attitude toward reading

as multidimensional. The dimensions that he identifies are the Enjoyment factor, the Individual Development factor, and the Utilitarian factor. These factors were first found to be applicable to secondary students. A study of primary children (Lewis and Teale, 1982) revealed that primary children also have attitudes toward reading that are multidimensional. While the enjoyment factor seems the most slightly developed among the dimensions identified by Teale (1982), Lewis and Teale found evidence that the concepts of reading for personal development and for a utilitarian purpose are emerging in primary children. This seems to be in agreement with the contentions of Aiken (1980) and Ewing (1977) that attitude is not only an affective, but also a cognitive function.

Heathington (1975) adopted the definition of reading attitudes given by Alexander and Filler (1976) for her development of an attitude scale. Since the instrument developed by Heathington was chosen for use in this study, Alexander and Filler's definition is accepted by this researcher as a working definition. Alexander and Filler state that attitude is "a system of feelings related to reading which causes the learner to approach or avoid a reading situation" (pg. 1). For teachers the knowledge about formation of attitude toward reading is a crucial component in the reading program (Alexander and

Heathington, 1975). A positive attitude toward reading must occur before teachers can expect to develop lifetime readers (Kennedy and Halinski, 1975).

The factors which influence reading attitude have been the subject of a number of studies. Among the factors supported in the literature are achievement (Ransbury, 1973; Askov and Fischback, 1973; Hake, 1969; Remer, 1970; Puryear, 1975), sex (Groff, 1962; Hansen, 1969; Ashov and Fischback, 1973; Diehl, 1972), teachers attitudes (Epstein, 1980; McEachern, 1980; Ransbury, 1973; Alexander and Filler, 1976), self concept (Quandt, 1972; Alexander and Filler, 1976) and parents and the home environment (Hansen, 1969).

In summary, the concept of attitude toward reading is both abstract and broad (Epstein, 1980). The definitions of attitude toward reading stem from general definitions of attitude. The literature reviewed above attempts to explain how these definitions apply to reading attitudes. As a result, reading attitude is recognized as multidimensional and dynamic. The working definition of attitude toward reading for this study is the one given by Alexander and Filler (1976). The measurement of this attitude is a reflection of the operational definition cited by Epstein, because it is the response of children to the Heathington Primary Reading Attitude Scale.

III. The Impact of Recreational Reading Programs on Students' Expressed Attitude Toward Reading

The literature on recreational reading reveals that some researchers have attempted to study the effects of various recreational reading programs through measures of school library use (Pfau, 1960; Pointer, 1971).

In the belief that young children who might be interested readers tend to become disinterested nonreaders, Pfau (1966) studied the effects of a recreational reading program for first and second grade students that extended over a two year period. The 170 students were identified in the first grade and randomly assigned to experimental and control groups. Both groups were given regular reading instruction from a basal program. The experimental group also received thirty minutes of daily recreational reading activities. The activities included free reading as well as the encouragement of oral and written activities. Pfau collected data on the number of trips students made to the library and the number of books which were checked-out over a two month period by each child. During interviews Pfau noted the number of times that students mentioned a reading activity. These data were compiled with data from the Reading Interest Inventory developed for the study. Pfau (1966) concluded that,

a concerted attempt to create an atmosphere conducive to enjoyment of reading provided the means for bringing about greater interest in reading, more reading activity, and greater library usage in the experimental group than in the control group.

Pfau found his results to be significant at the .001 level.

Pointer (1979) attempted to assess the value of a school library program on personal reading development of fifth graders over a seven month period in a descriptive study. Pointer measured reading attitudes with the Dulin-Chester Reading Attitude Scale and the "reading" component of the Right to Read Semantic Differential. Reading records were maintained by the students. The library program studied attempted to utilize Hunt's (1960) theory of sustained silent reading in an environment "saturated" according to Fader (1968) and individualized according to Veatch's (1959) philosophy. Using a t-test for correlated samples, Pointer found no significant change in student attitude toward reading. During the last two months of the study, however, there was an increase in the number of books reported as read by the students.

Some researchers have attempted to assess the nature of recreational reading programs by examining children's reading habits. The recreational book reading habits

of fifth graders were the subject of a related study by Stahlschmidt (1981). The subjects were 147 students identified as frequent and infrequent book readers. The study attempted to identify the differences between frequent and infrequent book readers in terms of reading comprehension, attitude toward reading and quality of recreational reading. The Estes Reading Attitude Scale correlated with data on amount of book reading revealed a strong and significant relationship between reading attitude and quantity of book reading. Interviews with subjects, parents and teachers revealed that frequent recreational book readers had both intrinsic and extrinsic reading motivation while infrequent book readers revealed only intrinsic motivations for choosing not to read books recreationally.

Naylor (1983) also attempted to compare avid and reluctant readers. The subjects were chosen based on scores from the Estes Reading Attitude Scale and their leisure reading habits. All subjects were in grades four, five or six. The subjects were assessed with six instruments designed by Naylor to reveal reading interests, reading settings, reasons for reading or not reading, motivations for increased reading and home environment. Naylor's study did not indicate the validity and reliability of the instruments. Remedial readers were not

included in the sample. Naylor found that "avid readers enjoyed a wider variety of printed media and subject matter, read in a greater number of settings and indicated more reasons for reading than did reluctant readers . . ."

Naylor (1983) did not find a significant difference between the home environments of avid readers and reluctant readers as reported by the parents. Naylor's conclusion was that avid readers place more value on their reading and have a broader reading range than reluctant readers.

Recreational reading programs have generally been conducted during the regular school day. In a unique study by Howell and Sylvester (1983) a ten week program was designed so that motivation occurred in school and the opportunity for the child to read after school was provided. Motivation was achieved through the use of read aloud sessions of approximately 10 minutes duration or until a very exciting part of the story occurred. Copies of the book were distributed and no directions were given to children regarding whether or not they should complete the books. Two types of interviews with children indicated to the researchers that motivation to read was improved by this program with third and fourth grade students. However, the report does not specify the method used in analyzing the interviews.

IV. The Impact of Sustained Silent Reading Programs on the Expressed Student Attitude Toward Reading

Sometime in the late fifties Lymon Hunt (1960) first drafted a paper that he would later publish in which he stated bluntly

The business of the reading teacher is to make readers. . . We are deluding ourselves if we believe we can make independent readers by using current textbook patterns of teaching. We must have practice reading periods where the goal for everyone is to consume as much print as possible in the given time without interruption. (p. 1)

In 1964 Hunt would further explain this concept and label it USSR: Uninterrupted Sustained Silent Reading. It would become known as SSR: Sustained Silent Reading when embellished by McCracken (1971) and part of HIP: High Intensity Practice as explained by Oliver (1976).

Sustained Silent Reading (hereafter referred to as SSR) has been the topic of varying types of qualities of research. Sometimes the definition of SSR has been expanded to include other factors or narrowed to delete some factors, but some aspects of its definition are always the same. SSR is a period of silent reading of self-selected materials in an environment free of interruptions. Most practitioners attach no recordkeeping or reporting to the technique, but this is not always true. Sometimes SSR is expanded with sharing and discussion times, but again, this is also not always the case.

The research on SSR reported in this paper is conflicting at best. Many studies do not report factors which may be critical to the success of SSR programs. For instance, teacher modeling recognized as important by McCracken (1978) and Gambrell (1978) is rarely mentioned. The availability of reading materials and the attitude of the teacher toward the SSR program are also factors recognized as important, but rarely mentioned.

The studies are also unique in their varying instrumentation and empirical testing procedures. The researcher was not able to locate any replications of any of the studies.

It is also worth noting that researchers by and large support SSR as a practice in school even when their research yielded no statistically significant findings. Informal observations of researchers convinced them that SSR is valuable even though in many cases they could not prove its value. Thus much has been written about SSR, but as Levine (1984) aptly stated, "Research on SSR is still in its infancy."

This section will summarize the research on SSR that relates to student attitude toward reading.

Student reading attitude has been reported as unaffected by sustained silent reading by some researchers (Harvey, 1974; Hanson, 1972; Einhorn, 1979) while others

have found sustained silent reading to be positively related to student attitude toward reading (Langford, 1976; Wilmot, 1975). One researcher, Collins (1980), found no significant relationship of SSR to reading attitude but noted a negative attitude trend in her results.

Hanson (1972) investigated the effects of daily sustained silent reading in second, third and fourth grade classrooms in a low-income-area school. After six months Hanson found no significant affect on the pupils attitudes toward reading nor any effect on their out of school reading habits. However, Hanson notes that two of the three grade levels experimental groups made greater gains in independent reading than the control groups on the same levels. The method of making this determination is not given. It raises the question of which grade levels are perhaps affected by SSR in this way.

In-service training regarding the use of sustained silent reading was an added feature of Harvey's (1974) study which included 700 subjects from grades 1-6. Pre- and post-attitude measures for the subjects showed no significant change after a two-month program of daily 30 minute periods of SSR. Harvey also measured teacher knowledge and opinions toward reading pre- and post- and found no significant change. Surely the consistency between teacher results and student results is worth

noting. The 79 teachers were given in-service training in SSR. Half were in experimental groups. The in-service training apparently did not change teachers' opinions related to reading and certainly produced no effect of significance in their students. There may have been factors in the in-service training that accounted for this, such as teacher participation being required by the three school systems that were part of the study; but this information is not given.

Students in grades two, four and six were the subjects in Wilmot's (1975) study, which revealed conflicting affects of SSR on students. This experimental study involved 576 students over a time period beginning November of 1972 and ending June, 1973. Approximately half the students at each of the stated grade levels participated in a SSR program and were compared for attitude change with the Wilmot Reading Attitude Inventory. The results indicated significantly better attitudes ($\alpha=.05$) among fourth and sixth grade students who participated in SSR as compared with those students who were not participants in SSR. The second graders showed no significant attitude change. Other data from the study indicated that SSR did not have a differential impact on students' attitudes when socio-economic status or I.Q. levels were considered. Surprisingly, a negative correlation between attitude

toward reading and the average amount of time devoted to SSR each month existed within the experimental group.

Langford (1978) examined fifth and sixth grade students in eleven elementary classrooms. She found that six USSR groups had more positive attitudes toward reading after six months than five control groups. The differences between groups were statistically significant at the .05 level. Langford included three measures of student attitude toward reading which included the Heathington Intermediate Attitude Scale, the Estes Attitude Scale and A Scale of Reading Attitude Based on Behavior (Rowell, 1967). The Heathington and Estes Scales did not reveal a significant change in student attitude at the .05 level. However, the Scale of Reading Attitude Based on Behavior revealed a positive attitude change that was significant at the .05 level.

Langford also found that white students had more positive attitudes toward reading than black students. Following the inclusion of 30 minute daily periods of SSR in their reading programs, however, black students showed significant and substantial gains in reading achievement over white students who also made achievement gains, although to a lesser extent.

In contrast, Einhorn (1979) found no statistically significant change in her study of 81 fifth graders in

a suburban parochial school. While not statistically significant, however, group means showed a difference in favor of the experimental group. The ten-week study utilized daily periods of SSR that were of fifteen minutes duration. Forty students participated in SSR with one teacher, while 41 students received reading skill practice with two teachers utilizing commercially prepared materials. The Estes Reading Attitude Scale was used to measure the groups and t-tests were used to analyze the data.

Einhorn noted an interesting trend in the records of reading pages. Total pages for the experimental and control groups were approximately the same during the first five weeks. During the final five weeks both groups greatly increased their quantity of pages read. During the last two weeks the experimental group showed its largest increase in number of pages read. Einhorn felt that this suggested a relationship between amount of independent reading and the duration of participation in the SSR program. The students in the study reported their own pages of reading, and Einhorn does not state how this information was verified or even whether or not it was verified.

The influence of parental aid and SSR in a combined approach was studied by Volpe (1982). This study involved 236 students in grades two and five during the 1980-1981

school year. The Estes Attitude Scale was used to measure attitudes. There were three treatment groups in the study. The first group had SSR introduced into the school program. The second group had parental aid introduced into the home through Parental Aid Training (PAT). The third group received SSR at school and parental aid at home. The attitudes of the SSR plus PAT group were significantly more positive than those of the other two treatment groups.

A reverse trend was reported by Collins (1980) among 220 students in grades two through six. There were 126 students in an experimental SSR group with teachers trained in this method. Collins measured student attitude toward reading with two instruments: How I Feel About Reading (Hunt, 1960), and Attitude Assessment (Collins, 1980). After fifteen weeks, during which daily periods of SSR were used, there was no significant difference in attitude between the groups. Both experimental and control groups actually showed a slightly negative change in attitude. Collins claimed that teachers for all ten classes were almost identical in training and experience. The teachers' classroom concerns were included in the project's planning, and therefore Collins concluded that there was much support among the teachers for the project. The researcher offered no reason for the negative trend

in attitude among both groups. She observed that, "SSR did not retard the growth of negative attitudes toward reading of the 126 experimental elementary school students who participated in a SSR program. Students in both experimental and control groups reported a decrease in time spent reading at home."

V. Summary

Recreational reading programs and Sustained Silent Reading programs have some factors in common. Both purport to improve student attitudes toward reading and both place emphasis on the wholistic act of reading self-selected material.

The effectiveness of these programs as teaching methods and as supplements to instruction are supported by some authorities because of the ease of implementation and the positive comments of teachers and students. Allington (1977) and McCracken (1971) are among SSR supporters because they believe in wholistic reading practice. However, as Evans and Towner (1975) point out the effects of such programs are not yet proven. While SSR is popular, popularity is not a criteria for measuring effectiveness.

As Levine (1984) points out, there is a need for long range and consistent studies on SSR that are carefully controlled. The most effective combination of

skill instruction with SSR to create positive student attitude at various grade levels is still unknown. Clearly, we must continue to evaluate SSR and replicate the best studies to determine the extent of SSR's value in the classroom. The optimal ages, duration of practice and techniques seem yet to be discovered.

In spite of all the unanswered questions, implementation of SSR and recreational reading programs continues to be recommended (Schaudt, 1983). One enthusiast of SSR heralds it "The Strand that untangles the skein" (Coughlin, 1977).

If SSR is so truly valuable, researchers must continue to seek proof of this value. Wherever educators solicit parental and community support for recreational reading programs of all types they must attempt to monitor the effects.

CHAPTER III

METHODS AND PROCEDURES

This chapter will describe the methods and procedures followed to accomplish this study, the purpose of which was to determine the effects of a volunteer recreational reading program on the expressed attitudes of students toward reading. Several procedures for conducting the study were identified and followed. In this chapter are descriptions of the reading marathon, the selection of the sample, the selection of the attitude measure and the development of the interview guide. An explanation of the procedures employed to collect the data and analyze them are also included.

I. Description of the Reading Marathon

Holleman, a principal developer of the Two Million Minute Reading Marathon described the program as follows:

The Two Million Minute Marathon is a motivational activity to encourage students to read more. Each student is asked to read for at least fifteen minutes each day at home. A weekly reading record will be signed by the parent and those minutes will add to the total number of minutes each school has to read to complete its leg of the marathon. Total school scores will be tabulated and prizes will be given to the school having the highest number of minutes of reading based on enrollment. Special awards will also be given to teachers and students who have highest classroom and individual scores. (Holleman, 1985)

Several methods were used to stimulate student interest in the marathon. Many community groups provided prizes for reading. The reading supervisor developed a list of 20 activities suggested for inclusion in the school day designed to motivate pupils to read at home. Individual home activities were also suggested to help parents to add to the motivation that was generated in school.

The reading marathon occurred between February 18 and March 18, 1985. The main goal of the program was to stimulate student interest in reading. Belief that opportunities for wide reading of self-selected materials would aid students to find pleasure in reading was the basis for the project.

The project was also designed to increase parent involvement in their children's reading activities. Parents of primary age children were asked to read to or with their children or to have their children read aloud to them during the marathon. Home activities were recommended such that parents and children might engage in these activities together.

II. Reading Marathon Guidelines

The reading marathon was conducted according to guidelines provided to teachers and principals by the

city Reading Supervisor. These guidelines are presented in Figure 1.

The reading marathon occurred during the late winter for a four week period beginning February 18 and ending March 18. Students were asked to maintain records of their reading for the full seven days of each week. The total marathon period was 28 days.

III. Selection of the Sample

A sample of 241 students was selected from four schools in the Knoxville City School System. The researcher made the selection based partially on the recommendations of the system's Reading Supervisor. In addition the researcher desired to include the following conditions in some or all of the participating schools:

1. To include various socio-economic strata of the system.
2. To include both black and white children as well as children from cultural backgrounds other than American.
3. Since the marathon was a voluntary program, to include schools that were likely to be participants.

Initially, the researcher consulted with the Reading Supervisor in regard to the criteria stated. The supervisor suggested six schools that would be appropriate for the study. The researcher made the final selection

GUIDELINES--CLASSROOM/SCHOOL

1. Participation should be voluntary for students.
2. In order to provide a good reading model, the teacher should read aloud for at least 15 minutes each day to the class. A reading record should be kept on the class record.
3. Class record sheets will be collected at the end of the marathon.

GUIDELINES--STUDENT MARATHON READERS

1. Any elementary student in the Knoxville City schools may participate. (Kindergarten students may participate by being read to for 15 minutes at home each day.)
2. Marathon reading must be done at home.
3. Marathon reading should be pleasure reading--not related to schoolwork.
4. Coaches (parents) will be responsible for initialing and monitoring record sheets.
5. Record sheets should be turned in weekly to be recorded on class record sheet.

Figure 1. Guidelines for the Two Million Minute Marathon
as set forth by the Knoxville City School
System

of four schools based on the criteria given and with some consideration for including various geographic areas of the system.

In each of the participating schools, all teachers and students in grades one, two and three were asked to participate in the study. Letters of information and informed consent forms were sent home with the students in these classes. In keeping with the federal human subjects requirements, the participating students were given an oral explanation of the study and asked to sign informed consent forms. The students who are part of the study gave their consent and returned, on the forms provided, the consent of their parents or guardians. Some students did not return permissions or were absent for one of the test days and so were not included in the sample. There were 241 students for whom permission and all test data were obtained along with their reading records.

IV. Selection of the Instruments

There were two instruments selected for use in this study. The Heathington Primary Reading Attitude Scale was selected as the primary source of data. An interview guide was created by the researcher to support the data on reading attitude and to gain information about student reading habits.

There were several reasons why the Heathington Primary Reading Attitude Scale was chosen for the study after the review of many instruments designed to measure attitude. These reasons were as follows:

1. The scale does not require any reading on the part of the subject.
2. The scale is easily administered and scored.
3. The twenty items on the scale came from interviews conducted by Heathington with children, thus, these are likely to be the items considered important by children.
4. Heathington established the instrument to be reliable and valid. Reliability was checked by the test-retest method and a reliability coefficient of .87 was found. Item analysis was done to determine if the items discriminated between positive and negative responses.
5. The Heathington Scale measures several parts of the reading environment including classroom, home, library and other places where children might read (Heathington, 1975).

Development of the Interview Instrument

The purpose of the interview was to provide additional data about the effect of the marathon on pupil attitudes toward reading. The interview also attempted to gain some information about parental support of and involvement

in the marathon at home. Parental supervision of this program was considered important by the researcher because of the youth of the subjects.

The researcher developed a set of questions to be asked during the interview (see Appendix C). This set of questions was revised several times in accordance with suggestions made by the researcher's major professor and colleagues who reviewed the instrument as recommended by Maples, Henerson and Fitzgibbon (1978). Attention was given to the selection of appropriate language, avoidance of interviewer bias, and suitable length (Orlich, 1978; Bobbie, 1982).

According to Van Dalen (1979) interviews are an appropriate method of gathering information from children regarding their attitudes. Group interviews are one method of collecting the data.

Small groups of pupils were interviewed together. Some groups contained four students while others contained five students. The researcher felt that the students would feel more comfortable and talk more freely among their peers than in a one-to-one situation with the researcher who was relatively unknown to the students. The researcher also felt that more children could be interviewed within the first week after the marathon. The researcher reasoned that the interviews should be

completed during the first week, because students might tend to be more accurate in their perceptions at this time than they would be if more time were allowed to pass.

V. Administration of the Pretest

The Heathington Primary Reading Attitude Scale was used for the pretest and the posttest.

The pretests were administered during the week directly prior to the beginning of the marathon and were given during the school day. Because days were lost because of weather-related school closings part of the data were collected during the morning hours and the remainder of the data were collected during the afternoon hours.

The directions given by Heathington for the administration of the scale were followed carefully. Conditions in each classroom were conducive to the positive performance of the task.

VI. Administration of the Posttest

The posttests were administered during the first few days after the completion of the marathon, and all were completed before any awards or prizes were announced. The posttests were administered during the regular school day.

The directions given by Heathington for the

administration of the scale were carefully followed. Once again conditions in each classroom were conducive to the positive performance of the task.

VII. Interviews

Interviews were conducted with 91 children. Children were selected by means of a stratified random sampling procedure. The researcher asked for volunteers from the marathon participants to be interviewed. The researcher then selected approximately equal numbers of boys and girls to be interviewed in small groups.

The interviewer took the students to a quiet place provided in each school. The interviews were conducted and recorded on audio cassette tape. Students were not told the purpose of the interview.

VIII. Reading Records

The program under study utilized a self-report measure of students on the number of minutes of reading. Each day students were to attempt reading for a minimum of fifteen minutes outside of the school. The actual number of minutes of reading that were completed was entered on the students' record sheets, and these sheets were initialed daily by the parent or guardian. The sheets were collected weekly by the teacher and recorded on a

class record form. The students' sheets were returned for further entries. The students maintained one sheet for the four weeks of the marathon (see Appendix C).

IX. Treatment of the Data

The attitude scales were scored manually by the researcher and the scores were verified by a second person. Total scores were obtained for each student by summing the scores of the items. Each item could receive a score between one and five. The median of the pretest scores was compared to the median of the posttest scores from the participants using the Wilcoxon Matched-Pairs Signed Ranks Test.

The minutes reported spent reading for the first week of the marathon were compared to the minutes of reading reported during the last week (fourth) of the marathon using a Wilcoxon Matched Pairs Signed Ranks Test. Since time is an interval variable, a t-test was also performed and means were compared.

To ascertain the impact of the marathon on grade levels, the three grade levels were compared using the Kruskal-Wallis One Way Analysis of Variance by Ranks.

The minutes of reading were correlated with the pupil post- attitude scores by the Spearman Rank Correlation Coefficient since the attitude scale was determined to produce ordinal data.

The interview data were analyzed for types of responses. The responses were categorized and tabulated to yield frequency data in the form of percentages.

CHAPTER IV

ANALYSIS OF THE DATA

I. Introduction

The data collected for this study were used to determine the effects of a volunteer recreational reading program on the attitude toward reading of primary level students. The subjects of this study were 241 first, second and third grade pupils from four elementary schools in the Knoxville City School System. Student attitudes toward reading were measured with the Heathington Primary Attitude Scale. Structured interviews were conducted with ninety-one students by the researcher. Students recorded their minutes of recreational reading time each day on a self report form verified by their parents or guardians.

The data were analyzed using nonparametric tests that included the Wilcoxon Matched Pairs Signed Ranks, the Spearman Rank Correlation Coefficient, and the Kruskal Wallis One Way Analysis of Variance.

The major reason for the use of nonparametric statistical tests had to do with the nature of the instrument and the age of the pupils. In the Heathington Primary Attitude Scale, children are asked to choose

from a set of five faces to indicate their attitude toward reading. Students selected one face in each group as their response to a question. The researcher felt that the students would not necessarily perceive these faces as increments with equal intervals. This may be due to the instrument as well as to the youth of the children in the study, who were in grades one, two and three.

The research questions and the results of the statistical tests are presented in this chapter.

II. Questions

Question 1

Does a volunteer recreational reading program significantly affect pupil attitude toward reading? In order to answer this question the data gathered with the Heathington Primary Attitude Scale were tested utilizing the Wilcoxon Matched-Pairs Signed Ranks Test. The test has proposed to test the null hypothesis (H_0) that the change in population median is zero against the alternative (H_1) that the change in population median exceeds zero. Prior to the onset of testing procedures, the researcher set the level of acceptable significance at $p < .05$.

The null hypothesis and the alternative for this test are:

H_0 : Treatment has no effect on pupil attitude.

The population median is 0.

H_1 : Treatment does effect the population attitude.

The population median exceeds 0.

The test revealed that within the 241 cases there were 21 ties, 111 negative ranks and 109 positive ranks. The result of this test was a $z = -1.415$, $p > .05$.

Therefore, the change in attitude was not significant at a .05 level. The attitude change reflected in the difference between pre- and post- scores from the Heathington Primary Attitude Scale was not of sufficient magnitude to conclude that the Reading marathon had any effect on pupil attitude toward reading (see Figure 2).

Question 2

Is there a correlation between the numbers of minutes students report reading and the post attitude scores? To ascertain the existence of such a correlation, the data were subjected to a Spearman Rank Order Correlation Coefficient Test. The test generated a correlation coefficient of $r = .12$ which is nonsignificant at $p > .05$. This correlation coefficient indicates that there is no apparent pattern of relationship for the minutes of reported reading and the student's post attitude score.

Question 3

Is there a significant difference in the amount of time pupils report reading during the first week compared

to the fourth week (last) of the twenty-eight day period? The data collected were tested statistically with the Wilcoxon Matched-Pairs Signed Ranks Test. The null Hypothesis stated that the treatment had no effect on the numbers of minutes students reported reading. The alternate hypothesis was that the treatment would affect the number of minutes of reading time reported.

The null hypothesis and the alternative are stated as follows:

H_0 : The population median equals zero.

The treatment had no effect on number of minutes of reported reading.

H_1 : The population median does not equal zero.

The treatment had an effect on the number of minutes student reported reading.

The result of the Wilcoxon Matched-Pairs Signed Ranks Test was $z = -4.39$, $p < .0001$. According to this result the null hypothesis should be rejected and the alternate hypothesis should be accepted. The test indicates that the population median was not zero. Since time is an interval variable, the researcher compared the mean minutes of reading for week four utilizing a correlated t-test. There was a significant difference, $t = -3.12$, $p < .002$, that indicated that there was a reduction in the mean minutes of reading during week four compared to week one of the marathon (see Table 1).

Table 1. Comparison of Means of Minutes of Reading by
Week for the Total Sample

Week	1	2	3	4
Mean	166	179	153	135
Std. Dev.	121	157	138	158
n	241	241	241	241

Question 4

Is there a differential impact of the program relative to grade level on pupil attitude? The Kruskal Wallis One Way Analysis of Variance by Ranks revealed that there was not a significant difference between grade levels ($\chi^2 = 1.94$, $df = 2$, $p > .05$). This result indicates further the lack of affect of the volunteer recreational reading program on student attitude toward reading and is consistent with the result of the testing on the first research question (see Table 2).

Question 5

What will interviews with subjects reveal about students' attitude toward reading after the marathon?

Five questions were asked of marathon participants regarding personal reactions to and feelings about the marathon. These data were collected to support those collected with the Heathington Primary Reading Attitude Scale. Ninety-one children were interviewed. All children, however, did not respond to all the questions.

The first question asked by the researcher was: How do you feel about the Two Million Minute Reading Marathon? Ninety-one responses were obtained from students to this question. Ninety-six percent of the responses were positive. This means that 96 percent of the students

Table 2. Comparison of Number of Participating Students
Per Grade Level in the Sample

Grade	Number of Students
1	72
2	79
3	<u>90</u>
Total	241

believed that they liked the marathon, found it to be fun, or referred to it as a good activity. Only 4 percent indicated that they did not like the marathon or that the marathon made them feel bad in some way.

The second interview question was: Do you read more now? Less now? Or about the same amount as before? There were eighty responses to this question. Seventy-nine percent of the respondents said they read more now. Thirteen percent of the respondents said they read less, and 9 percent said that they read about the same now as before the marathon.

The third question asked by the researcher was: Do you believe that you will do more reading at home now that the marathon is over? Eighty-seven students responded to this question. Of these, 78 percent said yes, 18 percent said no, and 3 percent said they did not know.

The fourth question asked by the researcher was: Before the marathon, how often did you read at home? There were sixty-nine responses to this question. Of these responses, 57 percent said they read daily, 12 percent said they read weekly, 25 percent said they read sometimes, and 7 percent said they never read prior to the marathon at home.

The fifth question asked by the researcher was: Did you read more or less than usual during the marathon? The responses from sixty-six students indicated that 91 percent read more during the marathon and 9 percent read less during the marathon.

The responses to the interview questions are given in Figure 2.

III. Summary

The data analyzed in this chapter indicated that the marathon did not significantly change students' attitudes toward reading. This study revealed an insignificant correlation between the number of minutes students recorded reading and their post attitude scores.

The record of minutes of reading showed that there was a very significant decline in the mean number of minutes of student reading when week one was compared to week four. The tests also indicated that there was not a differential impact on student attitude toward reading according to grade level.

The interview data indicated that the reading marathon was perceived by students as a good activity that caused them to read more than usual. The interview data conflict with the data on minutes of reading which seems to indicate a negative trend during the marathon. There are, however,

Question 1	n 91	Positive 87	Negative 4	
Question 2	n 80	More 63	Less 10	Same 7
Question 3	n 87	Yes 68	No 16	Don't Know 3
Question 4	n 69	Daily 39	Weekly 8	Sometimes 17 Never 5
Question 5	n 66	More 60	Less 6	

Figure 2. Response categories and raw numbers of responses of pupils to interview questions

some other possible reasons for this trend that will be pointed out in Chapter V.

The pretest and posttest comparison of the Heathington Primary Reading Attitude Scale indicates that no significant attitude change occurred during the marathon.

CHAPTER V

SUMMARY, FINDINGS, CONCLUSIONS, DISCUSSION, AND
IMPLICATIONS FOR FURTHER RESEARCH

I. Summary

The Purpose

The purpose of this study was to determine the effect of a single, specific volunteer recreational reading program that utilized self-report measures and provided pupil incentives intended to improve the expressed attitudes toward reading of selected groups of pupils in grades one through three.

The particular program under study was designed and implemented by supervisory and teaching personnel in the Knoxville City School System of Knoxville, Tennessee. The school system sponsored the program in volunteering elementary schools throughout the district. The official title of the program was "The Two Million Minute Reading Marathon."

The study attempted to answer the following questions:

1. Does a volunteer recreational reading program significantly affect pupil attitude toward reading?
2. Is there a significant correlation coefficient

between the numbers of minutes students report reading and their post attitude scores?

3. Is there a significant difference in the mean amount of time pupils report reading during the first week compared to the fourth week of the twenty-eight day period?
4. Is there a differential impact of the program on student attitude toward reading relative to grade level?
5. What will interviews with subjects reveal about subjects' attitude toward reading after the marathon?

The "marathon" as a type of recreational reading program appeared to be unique, at least insofar as indicated in the literature. Programs reported in the literature are those developed for use during school hours. In the marathon some of the reading experiences and all of the incentives to read occurred during the school day. However, the thrust of the program was developed to be carried out by the participants during after school hours.

The Procedures

The sample for this study came from the first, second and third grades in four schools in the Knoxville

City School System. The schools were identified prior to the marathon. Each of the schools used in the study was chosen to participate based on the likelihood that it would be a participant in the voluntary recreational reading program. Participation in the program was voluntary for schools, individual teachers, and students.

The researcher attempted to represent various areas of the school system so that the data would not be biased by virtue of having been obtained in one particular socio-economic area. The sample contained 241 students.

After a review of instruments developed to measure reading attitude, the Heathington Primary Attitude Scale was chosen. Reasons for selection included the established validity and reliability of this instrument in other research use, its ease of administration and scoring, and its suitability for the sample. This scale was administered both before and after the marathon.

The researcher also developed an interview guide to be used at the conclusion of the marathon to gain additional data to the attitude measure. Ninety-one children were interviewed.

During the marathon the students individually recorded the number of minutes of reading that they did each day after school. Parents verified each entry with their initials. The total number of minutes of reading was recorded each week by the classroom teacher and recorded on a class chart.

Nonparametric statistical tests were used to compare the median attitude scores of students on the pre- and post-measures obtained from the Heathington Primary Reading Attitude Scale. The mean numbers of minutes read during the first week were compared to the mean numbers of minutes reading during the fourth (last) week of the marathon with a t-test. Differences between grade levels were tested with the Kruskal Wallis One Way Analysis of Variance Test. The number of total minutes of reading were correlated with the post- attitude score through the use of the Spearman's Rank Order Correlation Coefficient. Frequency data were obtained from the interviews.

II. Findings

The findings of this study include the following:

1. The change in student attitude was not significant according to the result of analysis of the pretest and posttest medians with a Wilcoxon Matched-Pairs Signed Ranks Test ($z = -1.415$, $p > .05$).
2. A nonsignificant correlation coefficient ($r = .12$, $p > .05$) was the result of the Spearman Rank Order Correlation Coefficient Test on the number of minutes students reported reading and the post attitude scores.

3. Both Wilcoxon Matched-Pairs Signed Ranks Test ($z = -4.39$, $p < .0001$) and a correlated t-test ($t = -3.14$, $p < .002$) comparing minutes to reading during week one and week four of the marathon showed a highly significant difference.
4. There was not a significant difference in pupil attitude toward reading between grade levels as revealed by the Kruskal Wallis One Way Analysis of Variance ($\chi^2 = 1.94$, $df = 2$, $p > .05$).
5. The interview data revealed that 96 percent of the students interviewed responded positively to the marathon, that 79 percent believed that they read more now because of the marathon, that 78 percent believed that they would read more at home after the marathon, that prior to the marathon only 57 percent read daily, and that 91 percent read more than usual during the marathon.
6. Based on the interview, only 4 percent of the students indicated a negative response to the marathon.
7. Based on the interview, only 13 percent of the students said they read less now and 9 percent said they read the same amount now as before the marathon.

8. Based on the interview, 18 percent of the students said they believed they would not read more at home now that the marathon was over and 3 percent said they did not know.
9. Students reported the amount of reading before the marathon as: daily, 56 percent; weekly, 12 percent; sometimes, 25 percent; and never, 7 percent.

III. Conclusions

The data collected in an effort to describe the effects of the reading marathon has lead the researcher to form the following conclusions:

1. The marathon had no effect on pupil attitude toward reading.
2. The number of minutes that students reported reading was not related to their post attitude score.
3. The interview data indicate that the response to the marathon was more positive than indicated by the Heathington Primary Reading Attitude Scale measurements or by the number of minutes of reading reported.
4. The interview data indicate that many students will continue to read more post marathon than they were reading prior to the marathon.

5. The reduction of minutes of reading during week four combined with informal conversations with students and teachers leads the researcher to believe that four weeks was too long for young students to maintain interest in the marathon's recordkeeping system and the competition for rewards.

IV. Discussion

The matter of measuring attitude change is more complex than simply looking at the pretest and posttest scores obtained with a measurement device such as the one used in this study. Attitudes are slow to change and are therefore unlikely to yield statistically significant changes over short time periods such as the twenty-eight days of this reading marathon.

Possible positive attitude change was suggested more by the interview data than by the test data. Student remarks included statements such as the following: "It really helped me with my reading," "It was fun," "I liked it alot," "It was good for me to do it." The results of the interviews make it possible to speculate that the marathon may produce positive attitude change over an extended period of time. That, in fact, the marathon could be the start of a change, is suggested by the

increased number of students who reported they were reading more now and felt that they would continue to read more. Therefore, there is the possibility that they will find increased pleasure in reading and experience a positive attitude change toward reading.

An interesting aspect of this study was that the correlation of total minutes of reading did not significantly correlate with the post attitude scores of the students on the Heathington Primary Reading Attitude Scale. The researcher expected to find a significant positive relationship between minutes of reading and attitude toward reading. First, it is possible that amount of time spent reading does not have a relationship to attitude. Another possibility is that the number of actual minutes of reading was reported inaccurately. This could have happened if parents were negligent in verifying time of reading and if the youth of the students limited their ability to perform this task accurately. Another cause for failure to find a correlation may lie in the researcher's methodology. It might have been more appropriate to have compared the post attitude score to the minutes of reading for the fourth week only of the marathon because the effects of beginning marathon enthusiasm on minutes of reading had probably dwindled.

The developers of the reading marathon hoped that this event would stimulate more reading by students and

that this increased amount of reading would be maintained over time. The researcher attempted to collect the amount of reading time for the first and fourth weeks of the marathon and compare these with statistical tests. The tests indicted that the marathon had adverse effects on the amount of reading time for the fourth week compared to the first week. The researcher feels, however, that there are several reasons to question this finding.

First, it is possible that the treatment may have discouraged reading to a very high degree. The researcher noted informally during the course of the marathon that the teachers and students frequently complained that the marathon was too long in duration to sustain interest among these very young students. A second possible explanation for the unexpected results of the test might be in the method of reporting the actual minutes of reading. Subjects may have given times that were random responses unrelated to the project. Students may also have failed to follow the guidelines given at the beginning of the marathon for proper reporting. There may have been discrepancies between teachers various methods for explaining these guidelines to children and their parents. Another possible explanation of the test result is simply that the treatment's affect dwindled during the last two weeks of reporting. The marathon concluded two weeks

prior to the onset of the Easter vacation. Student interests may have been diverted from the marathon by families planning trips or activities for the week of vacation. Another factor may be that since the children were young they probably had very poor concepts of actual time spent reading. If parents did not carefully supervise the reporting of minutes of reading for these weeks the data would not be accurate and therefore this test result would be inaccurate. Because the marathon program did include rewards as incentives for reading, the truthfulness of reporting minutes of reading is also a legitimate concern. This issue has been addressed by others (Carlsmith, Ellsworth and Aronson, 1976; Helmstadter, 1970; Sellitz, Wrightsman and Cook, 1976) as an element affecting the validity of studies in which self report measures are used. The researcher also feels that the minutes of reading reported during the first week of the marathon may reflect the enthusiasm generated at the beginning of the project. The minutes of reading reported during the fourth week may reflect the lack of this enthusiasm. Therefore, the children seem to have more negative participation than they had in reality.

The researcher suspects that student inability to report, lack of adequate parental supervision of reporting, and the possibility of deliberate reporting inaccuracies due to the competition for rewards combine to make the data for these tests suspect.

The most favorable response of students to the marathon is reflected by the interview data. Interviews were conducted by the researcher with small groups of students. While there is a possibility for group members to influence each other's responses, the researcher reasoned that the children would talk more freely in a small group because they might tend to feel more secure. This was important because of the youth of the students and because the researcher was relatively unknown to the students.

The thrust of the interview responses to the marathon was very positive. One consideration, however, should be noted. All children did not respond to all questions. Some children seemed unable to respond to some questions. This points out the difficulty of creating interview questions that all of the students are able to understand. At least one question (number 5, see Appendix C), seemed to call for a higher level of thinking than some of the youngest students could handle. Where concepts of time were involved in the questions, less mature students found it difficult to give a response.

V. Implications for Further Research

Recreational reading programs such as the reading marathon need continued study. This study suggests several points of departure for further research.

Among future research efforts which might be undertaken are the following:

1. Further attempts to discover if amount of reading time can be related to attitude scores on measuring devices such as the one used in this study;
2. Attempts to discover the effects on young students of shorter marathons than the one reported on here;
3. Studies with young pupils that involve the reporting of pages read instead of minutes read;
4. Studies of marathons that record minutes of reading with various methods of verifying the minutes recorded;
5. Follow-up studies six months to a year after a study such as this one to measure attitude changes;
6. Attempts to measure teacher attitudes toward such events as the marathon, to note any changes that occur and to correlate these changes with student attitude changes
7. Attempt to determine how much support a program such as the marathon receives at home and how long this support can be maintained.

BIBLIOGRAPHY

REFERENCES

- Aiken, L. R. (1980). Attitude measurement and research. In D. A. Payne (Ed.), Recent developments in affective measurement. San Francisco: Jossey-Bass, Inc.
- Ajzen, I., & Fishbein, M. (1980). Understanding attitudes and predicting social behavior. Englewood Cliffs, NJ: Prentice-Hall.
- Alexander, J. E., & Heathington, B. (1975). A crucial fourth component in reading instruction-attitudes. Tennessee Education, 5(2), 32-36.
- Alexander, J. E., & Filler, R. C. (1976). Attitudes and reading. Newark, DE: International Reading Association.
- Allington, R. L. (1977). If they don't read much, how they ever gonna get good? Journal of Reading, 21(1), 57-61.
- Anastasi, A. (1976). Psychological Testing. New York: Macmillan.
- Askov, E. N., & Fishbach, J. F. (1973). An investigation of primary pupils' attitudes toward reading. The Journal of Experimental Education, 41, 1-7.
- Babbie, E. T. (1982). Social research for consumers. Belmont, CA: Wadsworth.
- Chomsky, C. (1978). When you still can't read in third grade: After decoding, what? In S. J. Samuels (Ed.), What research has to say about reading instruction (pp. 13-20). Newark, DE.
- Collins, C. (1980). Sustained silent reading periods; effect on teachers' behaviors and students' achievement. Elementary School Journal, 81(2), 108-114.
- Colvin, M. A., & Stetson, E. (1980). A recreational reading program for disabled readers: It works. Reading Horizons, 20(4), 247-251.
- Coughlin, A. G. (1977). SSR: The strand that untangles the skein. Curriculum Review, 16, 352-353.

- Cunningham, P. (1984). How should poor readers be taught? Educational Leadership, 42(4), 91.
- Davis, J. C. (1984). Readers beget readers - the importance of setting a reading example. Tennessee Reading Teacher, 7(1), 9-10.
- Diehl, J. A. (1972). A study of grade six students' attitude toward reading. Unpublished doctoral dissertation, The University of Tennessee.
- Dietrich, D. M., & Matthews, V. (1968). Development of lifetime reading habits. Newark, DE: International Reading Association.
- Dotson, M. M. (1977). The relationship between fifth grade children's attitude toward reading and factors such as success or failure in reading, intelligence quotient, sex, grade retention, level of grade retention, and socioeconomic status. Unpublished doctoral dissertation, The University of Tennessee, Knoxville.
- Duffey, G. G. (1967). Developing the reading habit. The Reading Teacher, 21(3), 253-256.
- Durkin, D. (1972). Teaching young children to read (3rd ed.). Boston: Allyn and Bacon.
- Edwards, A. L. (1957). Techniques of attitude scale construction. New York: Appleton-Crofts.
- Einhorn, J. A. (1980). Sustained silent reading practice: Its effects upon student reading habits and attitudes toward reading. ERIC Document Reproduction Service ED 174 969.
- Epstein, I. (1980). Measuring attitudes toward reading. (Report No. 73). Princeton, NJ: ERIC Clearinghouse on Tests, Measurement and Evaluation (ERIC Document Reproduction Service No. ED 196 938).
- Ewing, J. M. (1977, October). Assessing attitudes to reading. Paper presented at the annual meeting of the Reading Association of Ireland, Dublin. (ERIC Document Reproduction Service No. ED 162 250).
- Fader, D. N., & McNeil, E. B. (1968). Hooked on books: Program and proof. New York: Berkeley Medallion.

- Gambrell, L. B. (1978). Getting started with sustained silent reading and keeping it going. The Reading Teacher, 32(3), 328-331.
- Groff, P. J. (1962). Children's attitude toward reading and their critical reading abilities in four content type materials. The Journal of Educational Research, 55, 313-314.
- Hake, J. M. (1969). "Covert motivations of good and poor readers. The Reading Teacher, 22, 731-738, 741.
- Hansen, H. S. (1969). The impact of the home literary environment on reading attitude. Elementary English, 46, 17-24.
- Hanson, R. A. (1972). A study of the effects of sustained silent reading on the reading attitudes and habits of second-grade, third-grade, and fourth-grade students in a low-income area school (Doctoral dissertation, University of North Dakota, 1972). Dissertation Abstracts International, 33, 5034A.
- Harris, C. J. (1975). Social reinforcement to increase the utilization of library books by sixth grade pupils. (ERIC Document Reproduction Service No. ED 117 689).
- Harvey, L. (1974). The effects of uninterrupted sustained silent reading inservice training on teachers and their students. Dissertation Abstracts International. 35, P7635A.
- Heathington, B. S. (1975). The development of scales to measure attitudes toward reading. Unpublished doctoral dissertation, The University of Tennessee.
- Henerson, M. E., Morris, L. L., & Fitz-Gibbon, C. (1978). How to measure attitudes. Beverly Hills, CA: Sage Publications.
- Hunt, L. C., Jr. (1960). The real task of the reading teacher. Unpublished manuscript. University of Vermont, Burlington.
- Hunt, L. C., Jr. (1970). Reading is 3 dimensional. Unpublished manuscript. University of Vermont, Burlington.
- Hunt, L. C., Jr. (1975). The challenge of individualized reading instruction. Unpublished manuscript. University of Vermont, Burlington.

- Howell, J. F., & Sylvester, T. A. (1983). Improving reading motivation. (ERIC Document Reproduction Service No. ED 227 454).
- Kennedy, L. D., & Halinski, R. S. (1975). Measuring attitudes: An extra dimension. Journal of Reading, 18(7), 518-522.
- Langford, J. C. (1978). The effects of uninterrupted sustained silent reading on the attitudes of students toward reading and their achievement in reading. (Doctoral dissertation, Auburn University, 1978). Dissertation Abstracts International 39, 4047A.
- Langford, J. C., & Allen, E. G. (1983). The effects of U.S.S.R. on students' attitudes and achievement. Reading Horizon, 23(3), 194-200.
- Levine, S. G. (1984). USSR - a necessary component in teaching reading. Journal of Reading, 27(5), 394-400.
- Lewis, R., & Teale, W. H. (1982). Primary school students' attitudes toward reading. Journal of Research in Reading, 5(2), 113-122.
- McCracken, R.A. (1971). Initiating sustained silent reading. Journal of Reading, 15, 521-524.
- McCracken, R. A., & McCracken, M. J. (1978). Modeling is the key to sustained silent reading. The Reading Teacher, 31, 406-408.
- Moore, J. C., Jones, C. J., & Miller, D. C. (1980). What we know after a decade of sustained silent reading. The Reading Teacher, 33(4), 445-449.
- Mork, T. A. (1972). Sustained silent reading in the classroom. The Reading Teacher, 25(5), 438-441.
- Morrow, L. M. (1983). Home and school correlates of early interest in literature. Journal of Educational Research, 76(4), 221-229.
- Naylor, S. B. (1983). A comparison of avid and reluctant readers in grades four, five, and six. Dissertation Abstracts International, 44, 3647A.
- Orlich, D. C. (1978). Designing sensible surveys. Pleasantville, NY: Redgrave.

- Pfau, D. W. (1966). An investigation of the effects of planned recreational reading programs in first and second grade. Dissertation Abstracts International, 27, 1719A.
- Pfau, D. W. (1967). Effects of planned recreational reading programs. The Reading Teacher, 21(1), 34-39.
- Pointer, J. M. G. (1979). A descriptive study of an elementary school library program emphasizing personal reading development. (Doctoral Dissertation, United States International University, 1979). Dissertation Abstracts International, 41, 0611A.
- Puryear, C. C. (1975). An investigation of the relationship between attitudes toward reading and reading achievement. Dissertation Abstracts International, 36, 7068A.
- Quandt, I. (1972). Self concept and reading (pp. 11-30). Newark, DE: International Reading Association.
- Quandt, I. (1976). Foreword, In J. E. Alexander & R. C. Filler, Attitudes and reading (p. v). Newark, DE: International Reading Association.
- Ransbury, M. K. (1973). An assessment of reading attitude. Journal of Reading, 17, 25-28.
- Remer, V. (1970). Take a giant step - A remedial reading program in a camp setting. Child Welfare, 49, 270-274.
- Roettger, D. (1980). Elementary students' attitudes toward reading. The Reading Teacher, 4, 451-453.
- Schaudt, B. A. (1983). Another look at sustained silent reading. The Reading Teacher, 36(9), 934-936.
- Siegal, S. (1956). Nonparametric statistics for the behavioral sciences. New York: McGraw-Hill.
- Stahlschmidt, A. D. (1981). A study of the recreational book reading habits of selected fifth-grade children. Dissertation Abstracts International, 42, 3009A.
- Teale, W. H. (1982). Reading attitudes and reading achievement: Domain-specific relations? Ad-Sig Journal, 5(1), 7-19.
- Towner, J. C., & Evans, H. M. (1975). Reading Horizons, 15(2), 83-86.

- Van Dalen, D. B. (1979). Understanding educational research: An introduction. New York: McGraw-Hill Book Co.
- Veatch, J. (1959). Individualizing your reading program: Self selection in action. New York: Putnam.
- Volpe, M. S. (1982). An investigation of student achievement and attitudes toward reading in two approaches to uninterrupted sustained silent reading programs. (Doctoral Dissertation, Rutgers University, 1982). Dissertation Abstracts International, 43, 2887A.
- Wilmot, M. P. (1975). An investigation of the effect upon the reading performance and attitude toward reading of elementary grade students, of including in the reading program a period of sustained, silent reading. Unpublished doctoral dissertation, University of Colorado at Boulder, 1975.

APPENDICES

APPENDIX A

Sherry Morgan
The University of Tennessee
College of Education
Suite 10-A
Knoxville, Tennessee 37996
January 25, 1985

Dr. John McCook
Knoxville City Schools
101 E. Fifth Avenue
Knoxville, Tennessee

Dear Dr. McCook,

I would like to conduct research for my doctoral dissertation in several Knoxville schools. I am submitting for your approval two copies of the proposal accompanied by the instruments which are proposed for use in the data collection.

The study is entitled "The effect of a volunteer recreational reading program that utilizes self report measures and provides pupil incentives on expressed reading attitudes of selected groups of pupils in grades one through three." The recreational reading program is actually the Two Million Minute Reading Marathon which your school system will soon implement. My dissertation, if you approve, will be a descriptive study of this program.

The schools in which I would like to conduct the study are: Giffin, Chilhowee, Mooreland Heights, Fair Garden, Rocky Hill, and Sequoyah.

Since the implementation of the reading marathon begins on February 18 and I need to collect initial data prior to that date, I hope you will be able to respond to this request soon.

Thank you for the time you will spend considering this matter. You may reach me at 974-5037 or 693-2985 if necessary.

Sincerely,

Sherry G. Morgan



KNOXVILLE BOARD OF EDUCATION

101 East Fifth Avenue, Knoxville, Tennessee 37917
Telephone (615) 544-3600

Dr. Fred Bedelle, Jr., Superintendent

Mr. Kenneth Bailes
Mr. J. W. Carty
Mrs. Sarah Moore Greene
Mrs. Marilyn Q. Jacobson
Dr. Robert F. Lash
Mr. D. M. Miller
Dr. Gene Overholt
Mrs. Tommie R. Walker
Dr. Roy W. Wallace

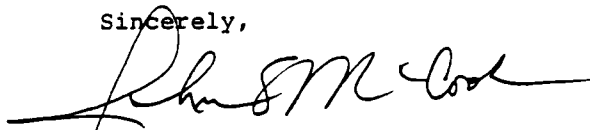
February 11, 1984

Ms. Sherry Morgan
721 East Meadcrest Drive
Knoxville, TN 37923

Dear Ms. Morgan:

This is to advise that I have reviewed your research project and am giving tentative approval. Your research shall be conducted in the following schools Giffin, Sequoyah, Chilhowee and Mooreland Heights.

Sincerely,



JOHN E. McCOOK, Ed.D.
Director of Public Relations/
Research/Negotiations

JEM:lm



KNOXVILLE BOARD OF EDUCATION

101 East Fifth Avenue, Knoxville, Tennessee 37917
Telephone (615) 544-3600

Dr. Fred Bedelle, Jr., Superintendent

Kenneth Bailes, President
J. W. Carty
Sarah Moore Greene
Marilyn Q. Jacobson
Robert F. Lash
D. M. Miller
Gene Overholt
Tommie R. Walker
Roy W. Wallace

I agree that as a condition of my conducting research within the Knoxville City Schools I will do the following:

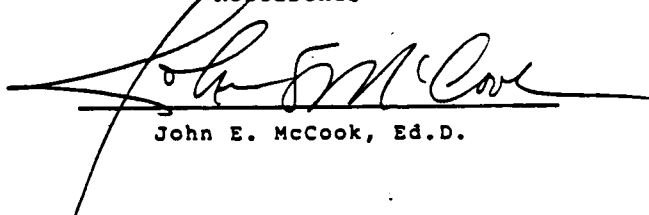
1. Provide quarterly progress reports to the Office of Research, Public Relations and Negotiations.
2. Provide a complete copy of research to the Office of Research, Public Relations and Negotiations.

A quarterly progress report shall include the location of the research, the scope of the project, the status of the research, the number of students involved and the approximate completion date.

The complete copy of research shall in the case of a dissertation or thesis be defined as a bound copy of the dissertation or thesis.

Failure to comply with Item 1 or 2 shall result in the termination of the student's right to use the Knoxville City Schools as a research basis.


Researcher


John E. McCook, Ed.D.

APPENDIX B

Sherry G. Morgan
The University of Tennessee
College of Education
Knoxville, Tennessee 37996

February 4, 1985

Dear Parent,

During the months of February and March a study will be conducted to examine the effects of the "Two Million Minute Reading Marathon" that is to be conducted by the Knoxville City School System. The study will be conducted by Mrs. Sherry Morgan, a researcher from the University of Tennessee. The study will be conducted during the 28 day period of the marathon. The dates of the marathon are February 18 to March 18, 1985.

The purpose of the study will be to determine whether or not a period of recreational reading will affect student attitude toward reading. Children will be asked to respond to an attitude scale given by the researcher at the beginning and at the end of the marathon. Some children will be randomly selected at the end of the marathon for an interview.

Your child's participation in any part of the study is voluntary. Your child may withdraw at any time without penalty or loss of benefits. No names will be used at any time by the researcher. The data collected will only be identified by grade level. The results of the study will only be reported as group results.

The results of the study will add to the body of knowledge regarding children's reading attitudes and the factors that affect those attitudes. This knowledge can help teachers in the teaching of reading.

Your child's participation in the study is important and requires your permission. Please sign the informed consent from which is attached and return to your child's teacher as soon as possible.

Your participation is greatly appreciated.

Sincerely,

Sherry G. Morgan

STUDENTS ARE IN GRADES 1-3

ORAL EXPLANATION TO STUDENTS:

My name is Sherry Morgan. I am a student and a teacher. I am from the University of Tennessee. I am trying to find out how children your age feel about reading. I would like to ask you some questions and I would like you to answer by putting an x on the face that shows how you feel.

(I will hold up the faces.)

In about a month I would like to ask you the questions again and have you mark the faces.

You do not have to help me unless you want to. You can answer now and change your mind about helping me again when I come back. You do not have to help me during either of my visits to your classroom. You are entirely free to do as you wish. No one will punish you in any way and there will be no effect on you at all in any way. If you have any questions about what I am doing you may ask me at any time. No one will be told at any time what faces you picked on the sheets. If you are willing to answer my questions please sign your name on the form that I am going to give you.

In about a month I may ask you to answer some questions for me in an interview. An interview is when we sit and talk together alone. If I do ask you, you may decide at that time whether or not you wish to talk to me. Again it is your decision and you may stop the interview at any time and no one will punish you in any way. None of this will affect any of your grades or anything else. It will not be harmful in any way to you regardless of whether or not you are a part of the program. No one will know what you said to me in the interview except me and I will not tell anyone what you said to me.

(At the time of the interviews I will again inform the children of the above information.)

The information that you share with me will help teachers in many schools to help their students be better readers. Your help is very much appreciated.

Informed Consent Form

Mrs. Morgan has explained the purpose of her study to me. I know that I may drop out at any time without penalty or loss of benefits. I understand that the results of the attitude scale and interview, should I be interviewed, will not include my name at any time. She will not use my name in reporting any results. The results will be given only by grade level. Under these conditions I agree to participate in the study.

Child's signature: _____

Date: _____

INFORMED CONSENT FORM

My signature below indicates that I understand the purpose of the study being conducted by Mrs. Sherry Morgan. I understand that my child's participation is voluntary and that he or she may withdraw at any time without penalty or loss of benefits. Student names will not be used at any time in the collection of data. The results of the study will be collected as group results so there is no threat to my child's anonymity. I give permission for my child to participate in the study under the conditions specified above.

Signature: _____ Date _____
Parent or Guardian

APPENDIX C

HEATHINGTON PRIMARY ATTITUDE SCALE

The scale consists of 20 questions which are to be read to the student. After listening to a question beginning with the words "How do you feel . . .", the student is asked to mark one of five faces (ranging from very unhappy, to unhappy, to neutral, to happy, to very happy) which shows how he feels about the question. A score of 5 is given for each very happy face chosen, a 4 for a happy face, a 3 for a neutral face, a 2 for an unhappy face, and a 1 for a very unhappy face.

The directions for the primary scale are as follows:

Your answer booklet is made up of two pages. Page one goes from number 1 to number 10; page two goes from number 10 to number 20. Beside each number are five faces, a very unhappy face, an unhappy face, a face that's neither happy nor unhappy, a happy face, and a very happy face. I will ask you how you feel about certain things and you will put an X on the face that shows how you feel. Suppose I said, How do you feel when you eat chocolate candy? Which face shows how you feel? Someone may have chosen an unhappy face because he doesn't like chocolate candy; someone else may have chosen a happy face because he likes chocolate candy. Now I'll read some questions to you and you mark the face that shows how you feel about what I read. Remember to mark how you feel because everyone does not feel the same about certain things. I'll read each question two times. Mark only one face for each number. Are there any questions? Now listen carefully. Number 1

A sample from the answer sheet

Heathington, 1975

The questions used in the scale are:

How do you feel . . .

1. when you go to the library?
2. when you read instead of playing outside?
3. when you read a book in free time?
4. when you are in reading group?
5. when you read instead of watching TV?
6. when you read to someone at home?
7. about the stories in your reading book?
8. when you read out loud in class?
9. when you read with a friend after school?
10. when you read stories in books?
11. when you read in a quiet place?
12. when you read a story at bedtime?
13. when it's time for reading circle (group)?
14. when you read on a trip?
15. when you have lots of books at home?
16. when you read outside when it's warm?
17. when you read at your desk at school?
18. when you find a book at the library?
19. when you read in your room at home?
20. when you read instead of coloring?

SAMPLE OF PARTIAL ANSWER SHEET

1.					
2.					
3.					
4.					

TWO MILLION MINUTE MARATHON

Name _____ Grade _____

WEEK ONE		
Day	Min. Read	Parent Initial
Sunday		
Monday		
Tuesday		
Wednesday		
Thursday		
Friday		
Saturday Individual Project		
Total Minutes		



WEEK TWO		
Day	Min. Read	Parent Initial
Sunday		
Monday		
Tuesday		
Wednesday		
Thursday		
Friday		
Saturday Individual Project		
Total Minutes		



WEEK THREE		
Day	Min. Read	Parent Initial
Sunday		
Monday		
Tuesday		
Wednesday		
Thursday		
Friday		
Saturday Individual Project		
Total Minutes		

WEEK FOUR		
Day	Min. Read	Parent Initial
Sunday		
Monday		
Tuesday		
Wednesday		
Thursday		
Friday		
Saturday Individual Project		
Total Minutes		

Student Interview

1. How do you feel about the Two Million Minute Reading Marathon?
2. Do you read more now? Less now? Or about the same as before?
3. Do you believe that you will do more reading at home now that the marathon is over?
4. Before the marathon, how often did you read at home?
5. Did you read more or less than usual during the marathon?

APPENDIX D

SUGGESTED CLASSROOM ACTIVITIES

One classroom activity may be completed by each classroom in a school. The classroom activity will count for 120 minutes.

1. Create a puppet show based on a familiar story. Put on the show for another class.
2. Trace the origin of hornbooks. Make models of the books from wood, poster board or gingerbread. Display the hornbooks in the library.
3. Pair a fifth grade class with a kindergarten class. Give the two classes an opportunity to meet and talk. (Each child should have a partner). The fifth grade child should select and read a book to the kindergarten child. Both classes may count this activity for bonus minutes.
4. Do a "You Are There" news program for a particular scene in a book. Participants should dress in costume.
5. Create a filmstrip for a particular story.
6. Impersonate a character and tell an episode of a book. Dress in costume.
7. Make a commercial for a book. Use props and work in small groups.
8. Compare/Contrast different versions of one story or several stories with similar themes.
9. Read Aloud Mural - on a large sheet of butcher paper - divide into squares. Select a story and draw scenes in sequence so the story is complete.
10. Hold special week featuring author or book character: i.e. (1) Winnie the Pooh week. Bring Pooh bears to school (categories: oldest, best loved, unusual, etc.) Make map of 100 acre woods. (2) Amelia Bedelia Week - read Amelia Bedelia books, make cartoons using word play found in books such as "dressing a chicken," stealing home."
11. Create a mural illustrating tall tales.
12. Have a "reading tree" - children read books/reading minutes to earn preprinted leaves to fill out the tree.
13. Create a special marathon bulletin board to show children's reading achievement. (See bear foot prints enclosed).
14. Hold a reading party. Use filmstrips to introduce books or ask your librarian to give a book talk.
15. Develop a readers' theatre - (reading parts without acting them out). Fairy tales lend themselves to playwriting.
16. Organize a TV game show - students write questions based on trivia.

17. Feature sports books - have students bring in sports trophies for display.
18. Create a reading club.
 - R.A.T.S. Reading and Talking Society (about books)
 - D.E.A.R. Drop Everything and Read
 - G.R.A.B. Go Read a Book
 - The 100 Minute Club
19. Reviewers Club - review books to encourage other students' reading.
20. Create a game - reading bingo to reading baseball.

SUGGESTED INDIVIDUAL ACTIVITIES

Four individual activities may be completed by each student. Each individual activity will count for 30 minutes. Individual activities must be shown to the teacher.

1. A mobile depicting a favorite book.
2. Design and make a bumper sticker about a book you have read.
3. Make a book mark illustrating a favorite part of a book.
4. Pretend you are a character from a book. Tell your thoughts or dreams in diary form.
5. Write and mail a letter to your favorite author. Show the teacher your letter before you mail it.
6. Write a character sketch of someone in a favorite book.
7. Design a new book jacket for a favorite book.
8. Make a mask of a book character.
9. Construct a diorama of a scene from a book.
10. Create a collage to represent a mood of a book.
11. Cook a food mentioned in a book.
12. Convert the events of a story into a song.
13. Make a costume for a doll depicting a favorite book character.
14. Learn to play a game mentioned in a book.
15. Make a model of a building mentioned in a book.
16. Design and make your own T-shirt.
17. Visit the public library. If you don't have a library card get one. If you do have a library card check out a book.
18. Do a special report on a famous person. You will need to use the library. List some important details.
19. Find a new reading spot and read for 45 minutes - no interruptions.
20. Write a new ending for a story or book that you have read.
21. Make a clay or play-doh model of something or someone you have read in a book. (A favorite character, event or object.)
22. Make a poster advertising your book.

APPENDIX E

Table A-1. Raw Data Collected for the Study.

Reader	Grade in School	Pre-Marathon Test Score	Post-Marathon Test Score	Minutes Spent in Self-Selected Reading				Total
				1st Week	2nd Week	3rd Week	4th Week	
1	3	94	97	60	180	0	0	240
2	3	98	94	165	150	0	0	315
3	3	71	69	60	92	0	0	152
4	3	55	62	85	110	90	209	494
5	3	72	77	105	0	0	0	105
6	3	82	79	125	190	110	55	480
7	3	92	91	45	90	95	0	230
8	3	97	95	100	145	65	80	390
9	3	97	95	137	675	685	960	2457
10	3	89	89	165	360	300	0	825
11	3	74	75	0	0	295	0	295
12	3	78	78	138	0	0	0	138
13	3	80	87	75	344	0	0	419
14	3	78	88	300	739	180	0	1219
15	3	92	91	316	0	0	0	316
16	3	69	87	269	0	0	0	269
17	3	76	78	91	182	324	164	761
18	3	90	95	338	256	310	273	1177
19	3	84	86	255	816	400	421	1892
20	3	92	81	165	300	75	390	930
21	3	79	77	60	105	0	15	180
22	3	43	40	60	512	330	270	1172
23	3	74	72	128	254	0	0	382
24	3	86	95	430	408	285	328	1451
25	3	47	48	60	90	60	0	210

Table A-1 (Continued)

Table A-1 (Continued)

Reader	Grade in School	Pre-Marathon Test Score	Post-Marathon Test Score	Minutes Spent in Self-Selected Reading				
				1st Week	2nd Week	3rd Week	4th Week	
				Total				
51	2	84	75	123	198	197	255	773
52	2	98	86	195	235	270	355	1055
53	2	83	96	50	60	45	45	200
54	2	56	99	195	265	425	495	1380
55	2	83	98	234	213	199	235	882
56	2	90	67	8	40	76	60	184
57	2	87	91	95	105	105	90	395
58	2	91	73	205	160	205	400	970
59	2	96	92	146	121	219	135	621
60	1	87	77	115	185	100	165	565
61	1	100	97	178	118	100	151	547
62	1	0	100	105	105	105	110	425
63	1	79	69	165	305	330	469	1269
64	1	97	100	103	163	159	113	538
65	1	100	100	134	118	110	110	472
66	1	90	100	25	83	113	142	363
67	1	100	76	115	45	129	70	359
68	1	69	70	70	120	70	10	270
69	1	82	76	165	245	175	195	780
70	1	71	72	80	50	45	0	175
71	1	92	88	60	20	0	0	80
72	1	84	91	136	170	112	115	533
73	1	100	100	85	60	58	110	313
74	1	66	68	95	125	105	105	430
75	1	100	100	195	120	120	120	555

Table A-1 (Continued)

Reader	Grade in School	Pre-Marathon Test Score	Post-Marathon Test Score	Minutes Spent in Self-Selected Reading				Total
				1st Week	2nd Week	3rd Week	4th Week	
76	1	72	78	165	170	195	210	740
77	1	82	80	63	0	60	0	123
78	1	94	91	170	255	270	260	955
79	1	90	74	65	0	0	0	65
80	1	09	93	218	200	215	295	928
81	1	82	87	290	265	275	235	1065
82	1	73	87	219	170	222	245	856
83	1	83	71	125	190	285	165	765
84	1	90	90	105	160	193	195	653
85	1	54	50	88	120	120	120	448
86	1	71	89	125	115	175	155	570
87	1	78	86	110	165	140	180	595
88	1	100	100	112	120	105	125	462
89	1	82	90	375	150	75	75	675
90	1	79	80	82	127	102	0	311
91	1	88	80	70	0	0	0	70
92	1	73	82	32	122	164	146	464
93	1	84	80	75	130	150	165	520
94	1	100	86	78	85	113	115	391
95	1	74	81	140	105	165	135	545
96	1	68	73	105	100	125	120	440
97	1	60	65	95	0	0	0	95
98	3	74	100	255	195	180	90	720
99	3	94	100	225	165	185	135	710
100	3	62	69	115	100	117	110	442

Table A-1 (Continued)

Reader	Grade in School	Pre-Marathon Test Score	Post-Marathon Test Score	Minutes Spent in Self-Selected Reading				Total
				1st Week	2nd Week	3rd Week	4th Week	
101	3	69	71	174	0	0	0	174
102	3	89	92	130	170	210	240	750
103	3	98	82	250	345	180	600	1375
104	3	84	89	132	221	195	0	548
105	3	88	100	128	0	0	0	128
106	3	86	82	90	90	130	100	410
107	3	56	75	45	65	0	0	110
108	3	63	56	105	115	112	127	459
109	3	61	72	165	0	70	0	235
110	3	91	92	415	330	450	0	1195
111	3	100	96	420	527	756	838	2541
112	3	93	74	164	160	160	135	619
113	3	59	71	158	78	81	35	352
114	3	64	69	240	290	400	480	1410
115	3	86	79	75	165	165	0	405
116	2	92	71	140	217	135	105	597
117	2	81	76	180	105	130	105	520
118	2	90	79	107	70	95	20	292
119	2	88	86	98	30	35	15	178
120	2	96	98	111	32	60	0	203
121	2	80	82	145	100	285	326	856
122	2	68	73	263	300	300	380	1243
123	2	95	96	240	300	170	145	855
124	3	89	89	184	115	220	112	631
125	3	96	91	500	710	636	506	2352

Table A-1 (Continued)

Reader	Grade in School	Pre-Marathon Test Score	Post-Marathon Test Score	Minutes Spent in Self-Selected Reading				Total
				1st Week	2nd Week	3rd Week	4th Week	
126	3	97	100	116	80	249	180	625
127	3	90	96	118	307	245	380	1050
128	3	92	94	125	165	170	255	715
129	3	93	98	172	365	158	355	1050
130	3	100	100	270	285	270	270	1095
131	3	82	97	105	105	105	105	420
132	3	90	83	297	297	195	215	1004
133	2	91	95	193	200	0	0	393
134	2	79	80	350	288	187	85	910
135	2	85	91	250	280	315	315	1160
136	2	79	69	131	141	147	137	556
137	2	85	83	124	275	281	135	815
138	2	87	93	0	0	205	215	420
139	2	69	74	90	85	283	348	806
140	2	73	94	138	180	130	147	595
141	1	85	84	20	30	0	0	50
142	1	90	84	180	205	225	0	610
143	1	78	56	95	75	60	55	285
144	1	100	97	110	118	65	0	293
145	1	69	73	48	15	30	30	123
146	1	51	48	135	50	45	0	230
147	2	94	55	225	283	66	0	574
148	2	60	67	95	126	0	0	221
149	2	100	88	250	234	111	63	658
150	2	98	99	115	80	72	0	267

Table A-1 (Continued)

Reader	Grade in School	Pre-Marathon Test Score	Post-Marathon Test Score	Minutes Spent in Self-Selected Reading				
				1st Week	2nd Week	3rd Week	4th Week	Total
151	2	71	62	82	76	106	60	324
152	2	86	81	135	140	60	15	350
153	2	79	71	200	285	165	90	740
154	2	69	39	126	206	75	0	407
155	2	72	74	85	0	0	0	85
156	2	98	96	225	185	130	65	605
157	2	82	83	80	55	0	0	135
158	2	100	100	244	150	170	75	639
159	2	90	96	315	260	100	0	675
160	2	92	90	75	75	50	0	200
161	2	79	66	180	300	270	160	910
162	2	98	100	135	90	0	0	225
163	2	96	79	438	770	670	510	2388
164	2	85	89	65	80	60	0	205
165	3	60	76	75	0	90	0	165
166	3	50	35	90	96	100	60	346
167	3	73	77	0	0	0	15	15
168	3	77	79	158	66	57	0	281
169	3	89	89	90	0	90	0	180
170	3	88	90	230	105	120	30	485
171	3	58	62	180	125	45	285	635
172	3	69	56	120	87	175	412	794
173	3	60	61	148	122	100	153	523
174	3	60	56	0	0	0	15	15
175	3	71	64	30	0	0	0	30

Table A-1 (Continued)

Reader	Grade in School	Pre-Marathon Test Score	Post-Marathon Test Score	Minutes Spent in Self-Selected Reading				
				1st Week	2nd Week	3rd Week	4th Week	Total
176	3	78	71	275	210	210	90	785
177	3	88	66	35	15	0	80	130
178	3	74	74	235	80	100	228	643
179	3	94	96	45	0	0	0	45
180	3	85	96	80	98	0	130	308
181	1	40	31	273	168	154	95	690
182	1	97	100	462	763	426	602	2253
183	1	68	72	100	90	115	95	400
184	1	72	74	155	405	148	120	828
185	1	62	62	55	193	100	85	433
186	1	47	63	235	230	210	180	855
187	1	84	76	192	185	275	155	807
188	1	77	75	165	75	145	275	660
189	2	86	74	225	157	442	235	1059
190	2	87	90	364	225	130	105	824
191	2	68	63	195	155	90	125	565
192	2	75	59	104	104	94	97	399
193	2	78	75	135	35	30	110	310
194	2	87	88	214	313	280	231	1038
195	2	65	60	55	211	192	165	623
196	2	74	69	85	90	40	105	320
197	2	93	92	195	155	225	305	880
198	2	82	92	130	45	0	0	175
199	2	61	53	587	185	30	105	907
200	1	97	100	173	155	55	94	477

Table A-1 (Continued)

Reader	Grade in School	Pre-Marathon Test Score	Post-Marathon Test Score	Minutes Spent in Self-Selected Reading				Total
				1st Week	2nd Week	3rd Week	4th Week	
201	1	92	82	420	345	225	120	±±0
202	1	83	77	123	107	45	55	330
203	1	75	75	156	120	177	140	593
204	1	80	68	135	115	155	105	510
205	1	66	66	425	315	290	405	1435
206	1	88	91	93	109	159	301	662
207	1	91	79	96	180	150	95	521
208	1	82	88	110	93	132	155	490
209	1	87	87	170	336	300	218	1024
210	1	78	81	100	146	145	80	471
211	1	86	82	175	195	195	165	730
212	1	70	59	106	170	210	150	636
213	1	77	68	335	285	200	340	1160
214	1	66	65	72	120	58	85	335
215	1	81	74	60	210	125	125	520
216	1	96	89	150	135	160	60	505
217	1	76	69	130	307	265	350	1052
218	1	72	49	140	145	120	15	420
219	1	69	70	290	175	185	190	840
220	2	74	59	65	32	35	50	182
221	2	75	54	165	146	116	138	565
222	2	65	46	660	360	70	0	1090
223	2	95	78	420	597	690	455	2162
224	2	76	76	910	999	231	0	2140
225	2	77	80	90	105	105	45	345

VITA

Sherry Guy Morgan was born in Knoxville, Tennessee, on September 4, 1949. She graduated from The University of Tennessee, Knoxville, in 1971 with a Bachelor of Science degree in Textiles and Clothing Merchandising. She worked in the merchandising field for four years. In 1978 she was awarded a Master of Science degree in Curriculum and Instruction. She taught for seven years in the Knoxville City School System. Mrs. Morgan was awarded the degree of Doctor of Education in 1985. During 1983-85 she was a field experience coordinator in the Curriculum and Instruction Department. In 1985 she also taught undergraduate social studies methods. Presently, Mrs. Morgan is principal at Anderson Elementary School and a member of the evening school faculty at The University of Tennessee.

Mrs. Morgan is a member of Phi Delta Kappa, The International Reading Association, National Council of Teachers of English, Association of Supervision and Curriculum Development, and Tennessee Association of Elementary School Principals.

She resides in Knoxville with her husband, Charles W. Morgan.